20.   (Amended) The storage medium of claim 16, further comprising the step of generating a code page output corresponding to characters matched.

REMARKS

The application has been thoroughly reviewed in light of the outstanding Office Action. Claims 1-20 are pending and have all been amended. Claims 1, 6, 11 and 16 are independent. Each one of the points of the Office Action are addressed below.

Claim Objections

Claims 1 and 2 were objected to for the informalities set out on page 2 of the Office Action. Applicant submits that these objections have been addressed and therefore withdrawal of the objection is respectfully requested.

§103 Rejections

Claims 1, 3, 5, 6, 8, 10, 11, 13, 15, 16, 18 and 20 were rejected under 35 U.S.C. §103 as being unpatentable under U.S. patent no. 5,500,931 (Sonnenschein) in view of U.S. patent no. 5,506,940 (Bamford et al.). Claims 2, 4, 7, 9, 12, 14, 17 and 19 were also rejected under §103 as being unpatentable under Sonnenschein in view of Bamford et al., and further in view of U.S. Patent no. 6,073,147 (Chan et al.). For the following reasons, Applicant respectfully submits that the claimed invention is patentable over the prior art.

The Invention

Claim 1 is directed to a method of selecting a font to output a message. The method

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includes creating a linked list of structures containing categories of information about available system fonts, evaluating characters of a message to output to match against the linked list and traversing the linked list to output the characters of the message. Amended independent claims 6, 11 and 16 recite the same patentable features.

It is a feature of the claimed invention that the linked list of structures which contains categories of information about fonts native on the particular system used to output the message. Each category includes a list of all language scripts supported and associated graphical font objects associated with a particular script. This allows characters of a message to be matched to available fonts to achieve the best output, especially if the message includes multilingual data.

The Prior Art

Sonnenschein is understood by Applicant to be directed to a system for applying font style changes to multi-script text. As shown in Figure 3, a list of fonts is created by analyzing a text stream. Each time a new font is found in the text stream it is added to the list which is then used to compare against a current character to identify a mapping.

As also understood by Applicant, Bamford et al. is directed to a font resolution method to convert a first font definition to a second font definition. A map coded font structure is extracted from a mixed object document content architecture document. This map coded font structure is then parsed and the parse names are matched against a stored font substitution table. An initial code page name and an initial character set name are then generated. If the first match is not successful, then a second matching operation is performed.

Analysis

To establish a *prima facie* case of obviousness, three criteria are required. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must have taught or suggested to one of ordinary skill in the art at the time the invention was made all the claim limitations at the time the invention was made. See M.P.E.P. 2143.

Accordingly, Applicant submits that the outstanding rejection under § 103 fails at least to meet the third requirement of prima facie obviousness, in that Sonnenschein and Bamford et al., when taken alone or in combination would not have taught or suggested to one of skill in the art at the time the invention was made of all the claim limitations. Specifically, Sonnenschein and Bamford et al. do not teach or suggest:

- initially creating a linked list of structures including categories of information about available system fonts

- evaluating characters of a message to output to match against the linked list, and

- traversing the linked list to output the characters of the message.

In the presently claimed invention, the linked list of structures enable the finding of an appropriate font for outputting the character occur quickly and easily. For at least these reasons, the claimed invention is patentable over the prior art. Since the remainder of the claims depend from one or another of the independent claims, they are patentable for the same reasons. Accordingly, withdrawal of the rejections under § 103 is respectfully requested.

CONCLUSION

In view of the foregoing remarks, Applicant submit that the issues raised in the outstanding Office Action have all been addressed. Accordingly, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

It is believed that no fees are due in connection with filing this Response. In the event that it is determined that fees are due, however, the Commissioner is hereby authorized to charge the undersigned's Deposit Account No. 50-0311.

Applicant's undersigned attorney may be reached in our Reston office by telephone at (703) 464-4800. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

Brian P. Hopkins, Reg. No. 42,669
Attorney for Applicant
c/o Mintz Levin Cohn Ferris
Glovsky & Popeo, P.C.

Date: July 9, 2002
11911 Freedom Drive, Suite 400
Reston, Virginia 20190
Tel. No.: (703) 464-4800

Addendum

1. (Amended) A method of selecting a font to output a message [to a printer], comprising the steps of:

    creating a linked list of structures containing categories of information about available system fonts;

    evaluating characters of a message to match against the linked list; and

    traversing the linked list to output the characters of the message

    [(a)   evaluating the characters of the message to build a liked list of available system fonts matching the characters; and

    (b)   interrogating font tag information to determine a set of supported output types; and

    (c)   printing the message by traversing the linked list of available system fonts].

2. (Amended) The method of claim 1, wherein the evaluating [of] step [(a)] comprises [the step of] comparing each character of the message in a universal character set [code to a set of available system fonts].

3. (Amended) The method of claim 1, wherein the output comprises printing [2, wherein the step of comparing each character comprises the step of testing the ability of each of the set of available system fonts to express that character].

4. (Amended) The method of claim 2, wherein the universal character set [code] is Unicode.

5. (Amended) The method of claim 1, further comprising the step of [(d)] generating a code page output corresponding to characters matched [to the available system fonts].

6.   (Amended) A system for selecting a font to output a message to a printer, comprising:

       a processor unit <u>for</u> [, the processor unit] <u>creating a linked list of</u>
<u>structures containing categories of information about available system fonts,</u>
<u>for evaluating characters of a message to match against the linked list and for</u>
<u>traversing the linked list to output the characters of the message</u>

       [evaluating the characters of the message to build a linked list of
available system fonts matching the characters and interrogate font tag
information to determine a set of supported output types]; and[;]

       a printer interface, connected to the processor unit, to output the
characters of the message to a printer by traversing the linked list [of available
system fonts].

7.   (Amended) The system of claim 6, wherein the processor unit compares each
character of the message in a universal <u>character set</u> [code] to a set of available system
fonts.

8.   (Amended) The system of claim 7, wherein the processor unit tests the ability of each
<u>structure</u> [of the set of available system fonts] to express <u>each</u> [that] character.

9.   (Amended) The system of claim 8, wherein the universal <u>character set</u> [code] is
Unicode.

10.   (Amended) The system of claim 6, wherein the processor unit generates a code page
output corresponding to characters matched [to the available system fonts].

11.   (Amended) A system for evaluating characters in a message to output to a printer,
comprising:

       processor means <u>for creating a linked list of structures containing</u>
<u>categories of information about available system fonts, for evaluating</u>

characters of a message to match against the linked list and for traversing the linked list to output the characters of the message [, the processor means evaluating the characters of the message to build a linked list of available system fonts matching the characters and interrogating font tag information to determine a set of supported output types]; and

printer output interface means, connected to the processor means, to output the characters of the message to a printer by traversing the linked list [of available system fonts].

12. (Amended) The system of claim 11, wherein the processor means compares each character of the message in a universal character set [code] to a set of available system fonts.

13. (Amended) The system of claim 12, wherein the processor means tests the ability of each of the structures [available system fonts] to express each [that] character.

14. (Amended) The system of claim 13, wherein the universal character set [code] is Unicode.

15. (Amended) The system of claim 11, wherein the processor generates a code page output corresponding to characters matched [to the available system fonts].

16. (Amended) A storage medium for storing machine readable code, the machine readable code being executable to select a font to output a message to a printer according to the method comprising [steps of]:

creating a linked list of structures containing categories of information about available system fonts;

evaluating characters of a message to match against the linked list; and

traversing the linked list to output the characters of the message

[(a)   evaluating the characters of the message to build a linked list of available system fonts matching the characters and interrogating font tag information to determine a set of supported output types; and

(b)   outputting the message by traversing the linked list of available system fonts].

17.   (Amended) The storage medium of claim 16, wherein the evaluating [of] step [(a)] comprises [the step of]comparing each character of the message in a universal character set [code] to a set of available system fonts.

18.   (Amended) The storage medium of claim 17, wherein the step of comparing each character comprises [the step of] testing the ability of each structure [of the set of available system fonts] to express each [that] character.

19.   (Amended) The storage medium of claim 18, wherein the universal character set [code] is Unicode.

20.   (Amended) The storage medium of claim 16, further comprising the step of [(c)] generating a code page output corresponding to characters matched [to each of the available system fonts].